

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**OPC unified architecture –  
Part 5: Information Model**

**INTERNATIONAL STANDARD PREVIEW**  
**(standards.iteh.ai)**

**Architecture unifiée OPC –  
Partie 5: Modèle d'informations**

[IEC 62541-5:2015](#)

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## CONTENTS

FOREWORD .....	12
1 Scope .....	14
2 Normative references .....	14
3 Terms, definitions and conventions .....	14
3.1 Terms and definitions .....	14
3.2 Abbreviations and symbols .....	14
3.3 Conventions for Node descriptions .....	15
4 NodeIds and BrowseNames .....	16
4.1 NodeIds .....	16
4.2 BrowseNames .....	16
5 Common Attributes .....	17
5.1 General .....	17
5.2 Objects .....	17
5.3 Variables .....	17
5.4 VariableTypes .....	17
6 Standard ObjectTypes .....	18
6.1 General .....	18
6.2 BaseObjectType .....	18
6.3 ObjectTypes for the Server Object .....	18
6.3.1 ServerType .....	18
6.3.2 ServerCapabilitiesType .....	20
6.3.3 ServerDiagnosticsType .....	22
6.3.4 SessionsDiagnosticsSummaryType .....	23
6.3.5 SessionDiagnosticsObjectType .....	24
6.3.6 VendorServerInfoType .....	25
6.3.7 ServerRedundancyType .....	25
6.3.8 TransparentRedundancyType .....	25
6.3.9 NonTransparentRedundancyType .....	26
6.3.10 NonTransparentNetworkRedundancyType .....	26
6.3.11 OperationLimitsType .....	27
6.3.12 AddressSpaceFileType .....	29
6.3.13 NamespaceMetadataType .....	29
6.3.14 NamespacesType .....	31
6.4 ObjectTypes used as EventTypes .....	31
6.4.1 General .....	31
6.4.2 BaseEventType .....	31
6.4.3 AuditEventType .....	33
6.4.4 AuditSecurityEventType .....	34
6.4.5 AuditChannelEventType .....	35
6.4.6 AuditOpenSecureChannelEventType .....	35
6.4.7 AuditSessionEventType .....	36
6.4.8 AuditCreateSessionEventType .....	36
6.4.9 AuditUrlMismatchEventType .....	37
6.4.10 AuditActivateSessionEventType .....	38
6.4.11 AuditCancelEventType .....	38
6.4.12 AuditCertificateEventType .....	39

6.4.13	AuditCertificateDataMismatchEventType.....	39
6.4.14	AuditCertificateExpiredEventType.....	39
6.4.15	AuditCertificateInvalidEventType.....	40
6.4.16	AuditCertificateUntrustedEventType.....	40
6.4.17	AuditCertificateRevokedEventType.....	40
6.4.18	AuditCertificateMismatchEventType.....	41
6.4.19	AuditNodeManagementEventType.....	41
6.4.20	AuditAddNodesEventType.....	42
6.4.21	AuditDeleteNodesEventType.....	42
6.4.22	AuditAddReferencesEventType.....	42
6.4.23	AuditDeleteReferencesEventType.....	43
6.4.24	AuditUpdateEventType.....	43
6.4.25	AuditWriteUpdateEventType.....	44
6.4.26	AuditHistoryUpdateEventType.....	44
6.4.27	AuditUpdateMethodEventType.....	45
6.4.28	SystemEventType.....	45
6.4.29	DeviceFailureEventType.....	45
6.4.30	SystemStatusChangeEvent.....	46
6.4.31	BaseModelChangeEvent.....	46
6.4.32	GeneralModelChangeEvent.....	46
6.4.33	SemanticChangeEvent.....	47
6.4.34	EventQueueOverflowEventType.....	47
6.4.35	ProgressEventType.....	48
6.5	ModellingRuleType.....	48
6.6	FolderType.....	48
6.7	DataTypeEncodingType.....	49
6.8	DataTypeSystemType.....	49
6.9	AggregateFunctionType.....	49
7	Standard VariableTypes.....	50
7.1	General.....	50
7.2	BaseVariableType.....	50
7.3	PropertyType.....	50
7.4	BaseDataVariableType.....	50
7.5	ServerVendorCapabilityType.....	51
7.6	DataTypeDictionaryType.....	51
7.7	DataTypeDescriptionType.....	52
7.8	ServerStatusType.....	52
7.9	BuildInfoType.....	52
7.10	ServerDiagnosticsSummaryType.....	53
7.11	SamplingIntervalDiagnosticsArrayType.....	53
7.12	SamplingIntervalDiagnosticsType.....	54
7.13	SubscriptionDiagnosticsArrayType.....	54
7.14	SubscriptionDiagnosticsType.....	54
7.15	SessionDiagnosticsArrayType.....	55
7.16	SessionDiagnosticsVariableType.....	56
7.17	SessionSecurityDiagnosticsArrayType.....	57
7.18	SessionSecurityDiagnosticsType.....	58
7.19	OptionSetType.....	58
8	Standard Objects and their Variables.....	59

8.1	General.....	59
8.2	Objects used to organise the AddressSpace structure .....	59
8.2.1	Overview .....	59
8.2.2	Root.....	60
8.2.3	Views.....	60
8.2.4	Objects .....	61
8.2.5	Types .....	61
8.2.6	ObjectTypes .....	62
8.2.7	VariableTypes.....	63
8.2.8	ReferenceTypes.....	64
8.2.9	DataTypes .....	64
8.2.10	OPC Binary.....	66
8.2.11	XML Schema .....	66
8.2.12	EventTypes.....	66
8.3	Server Object and its containing Objects.....	67
8.3.1	General.....	67
8.3.2	Server Object.....	68
8.4	ModellingRule Objects .....	69
8.4.1	ExposesItsArray.....	69
8.4.2	Mandatory.....	69
8.4.3	Optional.....	69
8.4.4	OptionalPlaceholder.....	70
8.4.5	MandatoryPlaceholder.....	70
9	Standard Methods .....	70
9.1	GetMonitoredItems.....	70
10	Standard Views .....	71
11	Standard ReferenceTypes .....	71
11.1	References .....	71
11.2	HierarchicalReferences .....	71
11.3	NonHierarchicalReferences .....	71
11.4	HasChild .....	72
11.5	Aggregates .....	72
11.6	Organizes .....	72
11.7	HasComponent .....	73
11.8	HasOrderedComponent .....	73
11.9	HasProperty.....	73
11.10	HasSubtype .....	73
11.11	HasModellingRule.....	74
11.12	HasTypeDefinition.....	74
11.13	HasEncoding .....	74
11.14	HasDescription .....	75
11.15	HasEventSource .....	75
11.16	HasNotifier.....	75
11.17	GeneratesEvent .....	75
11.18	AlwaysGeneratesEvent .....	76
12	Standard DataTypes .....	76
12.1	Overview.....	76
12.2	DataTypes defined in IEC 62541-3.....	76

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IEC 62541-5:2015

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12.3	DataTypes defined in IEC 62541-4.....	81
12.4	BuildInfo .....	82
12.5	RedundancySupport .....	82
12.6	ServerState.....	83
12.7	RedundantServerDataType .....	83
12.8	SamplingIntervalDiagnosticsDataType .....	84
12.9	ServerDiagnosticsSummaryDataType .....	84
12.10	ServerStatusDataType .....	85
12.11	SessionDiagnosticsDataType.....	86
12.12	SessionSecurityDiagnosticsDataType .....	87
12.13	ServiceCounterDataType .....	88
12.14	StatusResult .....	88
12.15	SubscriptionDiagnosticsDataType .....	89
12.16	ModelChangeStructureDataType .....	90
12.17	SemanticChangeStructureDataType .....	90
12.18	BitFieldMaskDataType .....	91
12.19	NetworkGroupDataType.....	91
12.20	EndpointUrlListDataType .....	92
Annex A (informative) Design decisions when modelling the server information .....		93
A.1	Overview.....	93
A.2	ServerType and Server Object .....	93
A.3	Typed complex Objects beneath the Server Object .....	93
A.4	Properties versus DataVariables .....	93
A.5	Complex Variables using complex DataTypes .....	94
A.6	Complex Variables having an array .....	94
A.7	Redundant information .....	94
A.8	Usage of the BaseDataVariableType.....	95
A.9	Subtyping .....	95
A.10	Extensibility mechanism.....	95
Annex B (normative) StateMachines .....		96
B.1	General.....	96
B.2	Examples of finite state machines .....	96
B.2.1	Simple state machine.....	96
B.2.2	State machine containing substates .....	97
B.3	Definition of state machine.....	98
B.4	Representation of state machines in the AddressSpace .....	98
B.4.1	Overview .....	98
B.4.2	StateMachineType .....	99
B.4.3	StateVariableType .....	100
B.4.4	TransitionVariableType .....	101
B.4.5	FiniteStateMachineType .....	101
B.4.6	FiniteStateVariableType.....	102
B.4.7	FiniteTransitionVariableType .....	103
B.4.8	StateType .....	103
B.4.9	InitialStateType.....	104
B.4.10	TransitionType.....	105
B.4.11	FromState.....	105
B.4.12	ToState.....	106
B.4.13	HasCause .....	106



B.4.14	HasEffect.....	106
B.4.15	HasSubStateMachine.....	107
B.4.16	TransitionEventType.....	107
B.4.17	AuditUpdateStateEventType.....	108
B.4.18	Special Restrictions on subtyping StateMachines.....	108
B.4.19	Specific StatusCodes for StateMachines.....	109
B.5	Examples of StateMachines in the AddressSpace.....	110
B.5.1	StateMachineType using inheritance.....	110
B.5.2	StateMachineType with a sub-machine using inheritance.....	111
B.5.3	StateMachineType using containment.....	112
B.5.4	Example of a StateMachine having Transition to SubStateMachine.....	113
Annex C (normative)	File Transfer.....	115
C.1	Overview.....	115
C.2	FileType.....	115
C.3	Open.....	116
C.4	Close.....	117
C.5	Read.....	117
C.6	Write.....	118
C.7	GetPosition.....	118
C.8	SetPosition.....	119
<b>iTeh STANDARD PREVIEW</b>		
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Figure 1	– Standard AddressSpace Structure.....	59
Figure 2	– Views Organization.....	60
Figure 3	– Objects Organization.....	61
Figure 4	– ObjectTypes Organization.....	62
Figure 5	– VariableTypes Organization.....	63
Figure 6	– ReferenceType Definitions.....	64
Figure 7	– DataTypes Organization.....	65
Figure 8	– EventTypes Organization.....	67
Figure 9	– Excerpt of Diagnostic Information of the Server.....	68
Figure B.1	– Example of a simple state machine.....	97
Figure B.2	– Example of a state machine having a sub-machine.....	97
Figure B.3	– The StateMachine Information Model.....	99
Figure B.4	– Example of an initial State in a sub-machine.....	104
Figure B.5	– Example of a StateMachineType using inheritance.....	110
Figure B.6	– Example of a StateMachineType with a SubStateMachine using inheritance.....	111
Figure B.7	– Example of a StateMachineType using containment.....	112
Figure B.8	– Example of a state machine with transitions from sub-states.....	113
Figure B.9	– Example of a StateMachineType having Transition to SubStateMachine.....	114
Table 1	– Examples of DataTypes.....	15
Table 2	– Type Definition Table.....	16
Table 3	– Common Node Attributes.....	17
Table 4	– Common Object Attributes.....	17
Table 5	– Common Variable Attributes.....	17



Table 6 – Common VariableType Attributes .....	18
Table 7 – BaseObjectType Definition .....	18
Table 8 – ServerType Definition .....	19
Table 9 – ServerCapabilitiesType Definition .....	21
Table 10 – ServerDiagnosticsType Definition .....	23
Table 11 – SessionsDiagnosticsSummaryType Definition .....	24
Table 12 – SessionDiagnosticsObjectType Definition .....	24
Table 13 – VendorServerInfoType Definition .....	25
Table 14 – ServerRedundancyType Definition .....	25
Table 15 – TransparentRedundancyType Definition .....	25
Table 16 – NonTransparentRedundancyType Definition .....	26
Table 17 – NonTransparentNetworkRedundancyType Definition .....	27
Table 18 – OperationLimitsType Definition .....	28
Table 19 – AddressSpaceFileType Definition .....	29
Table 20 – NamespaceMetadataType Definition .....	30
Table 21 – NamespacesType Definition .....	31
Table 22 – BaseEventType Definition .....	31
Table 23 – AuditEventType Definition .....	34
Table 24 – AuditSecurityEventType Definition .....	34
Table 25 – AuditChannelEventType Definition .....	35
Table 26 – AuditOpenSecureChannelEventType Definition .....	35
Table 27 – AuditSessionEventType Definition .....	36
Table 28 – AuditCreateSessionEventType Definition .....	37
Table 29 – AuditUrlMismatchEventType Definition .....	37
Table 30 – AuditActivateSessionEventType Definition .....	38
Table 31 – AuditCancelEventType Definition .....	38
Table 32 – AuditCertificateEventType Definition .....	39
Table 33 – AuditCertificateDataMismatchEventType Definition .....	39
Table 34 – AuditCertificateExpiredEventType Definition .....	40
Table 35 – AuditCertificateInvalidEventType Definition .....	40
Table 36 – AuditCertificateUntrustedEventType Definition .....	40
Table 37 – AuditCertificateRevokedEventType Definition .....	41
Table 38 – AuditCertificateMismatchEventType Definition .....	41
Table 39 – AuditNodeManagementEventType Definition .....	41
Table 40 – AuditAddNodesEventType Definition .....	42
Table 41 – AuditDeleteNodesEventType Definition .....	42
Table 42 – AuditAddReferencesEventType Definition .....	43
Table 43 – AuditDeleteReferencesEventType Definition .....	43
Table 44 – AuditUpdateEventType Definition .....	43
Table 45 – AuditWriteUpdateEventType Definition .....	44
Table 46 – AuditHistoryUpdateEventType Definition .....	44
Table 47 – AuditUpdateMethodEventType Definition .....	45
Table 48 – SystemEventType Definition .....	45

Table 49 – DeviceFailureEventType Definition .....	46
Table 50 – SystemStatusChangeEventDefinition .....	46
Table 51 – BaseModelChangeEventDefinition .....	46
Table 52 – GeneralModelChangeEventDefinition .....	47
Table 53 – SemanticChangeEventDefinition .....	47
Table 54 – EventQueueOverflowEventDefinition .....	47
Table 55 – ProgressEventDefinition .....	48
Table 56 – ModellingRuleDefinition .....	48
Table 57 – FolderType Definition .....	49
Table 58 – DataTypeEncodingType Definition .....	49
Table 59 – DataTypeSystemType Definition .....	49
Table 60 – AggregateFunctionType Definition .....	49
Table 61 – BaseVariableType Definition .....	50
Table 62 – PropertyType Definition .....	50
Table 63 – BaseDataVariableType Definition .....	51
Table 64 – ServerVendorCapabilityType Definition .....	51
Table 65 – DataTypeDictionaryType Definition .....	51
Table 66 – DataTypeDescriptionType Definition .....	52
Table 67 – ServerStatusType Definition .....	52
Table 68 – BuildInfoType Definition .....	53
Table 69 – ServerDiagnosticsSummaryType Definition .....	53
Table 70 – SamplingIntervalDiagnosticsArrayType Definition .....	54
Table 71 – SamplingIntervalDiagnosticsType Definition .....	54
Table 72 – SubscriptionDiagnosticsArrayType Definition .....	54
Table 73 – SubscriptionDiagnosticsType Definition .....	55
Table 74 – SessionDiagnosticsArrayType Definition .....	55
Table 75 – SessionDiagnosticsVariableType Definition .....	56
Table 76 – SessionSecurityDiagnosticsArrayType Definition .....	58
Table 77 – SessionSecurityDiagnosticsType Definition .....	58
Table 78 – OptionSetType Definition .....	59
Table 79 – Root Definition .....	60
Table 80 – Views Definition .....	61
Table 81 – Objects Definition .....	61
Table 82 – Types Definition .....	62
Table 83 – ObjectTypes Definition .....	63
Table 84 – VariableTypes Definition .....	63
Table 85 – ReferenceTypes Definition .....	64
Table 86 – DataTypes Definition .....	66
Table 87 – OPC Binary Definition .....	66
Table 88 – XML Schema Definition .....	66
Table 89 – EventTypes Definition .....	67
Table 90 – Server Definition .....	69
Table 91 – ExposesItsArray Definition .....	69


  
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<https://standards.iteh.ai/catalog/standards/sist/67944262-22d1-41c4-b2ef-2a9e30122025/iec-62541-5-2015>

Table 92 – Mandatory Definition .....	69
Table 93 – Optional Definition.....	70
Table 94 – OptionalPlaceholder Definition .....	70
Table 95 – MandatoryPlaceholder Definition .....	70
Table 96 – GetMonitoredItems Method AddressSpace Definition .....	71
Table 97 – References ReferenceType .....	71
Table 98 – HierarchicalReferences ReferenceType.....	71
Table 99 – NonHierarchicalReferences ReferenceType .....	72
Table 100 – HasChild ReferenceType.....	72
Table 101 – Aggregates ReferenceType .....	72
Table 102 – Organizes ReferenceType .....	73
Table 103 – HasComponent ReferenceType .....	73
Table 104 – HasOrderedComponent ReferenceType .....	73
Table 105 – HasProperty ReferenceType.....	73
Table 106 – HasSubtype ReferenceType .....	74
Table 107 – HasModellingRule ReferenceType .....	74
Table 108 – HasTypeDefinition ReferenceType .....	74
Table 109 – HasEncoding ReferenceType.....	74
Table 110 – HasDescription ReferenceType .....	75
Table 111 – HasEventSource ReferenceType .....	75
Table 112 – HasNotifier ReferenceType.....	75
Table 113 – GeneratesEvent ReferenceType .....	76
Table 114 – AlwaysGeneratesEvent ReferenceType .....	76
Table 115 – IEC 62541-3 DataType Definitions.....	77
Table 116 – BaseDataType Definition .....	78
Table 117 – Structure Definition.....	78
Table 118 – Enumeration Definition .....	79
Table 119 – ByteString Definition.....	79
Table 120 – Number Definition.....	79
Table 121 – Double Definition .....	79
Table 122 – Integer Definition.....	80
Table 123 – DateTime Definition.....	80
Table 124 – String Definition.....	80
Table 125 – UInteger Definition .....	80
Table 126 – Image Definition .....	80
Table 127 – UInt64 Definition.....	81
Table 128 – IEC 62541-4 DataType Definitions.....	81
Table 129 – UserIdentityToken Definition.....	82
Table 130 – BuildInfo Structure.....	82
Table 131 – BuildInfo Definition .....	82
Table 132 – RedundancySupport Values .....	82
Table 133 – RedundancySupport Definition .....	83
Table 134 – ServerState Values.....	83

Table 135 – ServerState Definition .....	83
Table 136 – RedundantServerDataType Structure .....	83
Table 137 – RedundantServerDataType Definition .....	84
Table 138 – SamplingIntervalDiagnosticsDataType Structure .....	84
Table 139 – SamplingIntervalDiagnosticsDataType Definition .....	84
Table 140 – ServerDiagnosticsSummaryDataType Structure .....	85
Table 141 – ServerDiagnosticsSummaryDataType Definition .....	85
Table 142 – ServerStatusDataType Structure .....	85
Table 143 – ServerStatusDataType Definition .....	86
Table 144 – SessionDiagnosticsDataType Structure .....	86
Table 145 – SessionDiagnosticsDataType Definition .....	87
Table 146 – SessionSecurityDiagnosticsDataType Structure .....	88
Table 147 – SessionSecurityDiagnosticsDataType Definition .....	88
Table 148 – ServiceCounterDataType Structure .....	88
Table 149 – ServiceCounterDataType Definition .....	88
Table 150 – StatusResult Structure .....	89
Table 151 – StatusResult Definition .....	89
Table 152 – SubscriptionDiagnosticsDataType Structure .....	89
Table 153 – SubscriptionDiagnosticsDataType Definition .....	90
Table 154 – ModelChangeStructureDataType Structure .....	90
Table 155 – ModelChangeStructureDataType Definition .....	90
Table 156 – SemanticChangeStructureDataType Structure .....	91
Table 157 – SemanticChangeStructureDataType Definition .....	91
Table 158 – BitFieldMaskDataType Definition .....	91
Table 159 – NetworkGroupDataType Structure .....	91
Table 160 – NetworkGroupDataType Definition .....	91
Table 161 – EndpointUrlListDataType Structure .....	92
Table 162 – EndpointUrlListDataType Definition .....	92
Table B.1 – StateMachineType Definition .....	100
Table B.2 – StateVariableType Definition .....	100
Table B.3 – TransitionVariableType Definition .....	101
Table B.4 – FiniteStateMachineType Definition .....	102
Table B.5 – FiniteStateVariableType Definition .....	103
Table B.6 – FiniteTransitionVariableType Definition .....	103
Table B.7 – StateType Definition .....	104
Table B.8 – InitialStateType Definition .....	105
Table B.9 – TransitionType Definition .....	105
Table B.10 – FromState ReferenceType .....	105
Table B.11 – ToState ReferenceType .....	106
Table B.12 – HasCause ReferenceType .....	106
Table B.13 – HasEffect ReferenceType .....	107
Table B.14 – HasSubStateMachine ReferenceType .....	107
Table B.15 – TransitionEventType .....	108

Table B.16 – AuditUpdateStateEventType .....	108
Table B.17 – Specific StatusCodes for StateMachines .....	109
Table C.1 – FileType.....	115
Table C.2 – Open Method AddressSpace Definition .....	117
Table C.3 – Close Method AddressSpace Definition .....	117
Table C.4 – Read Method AddressSpace Definition .....	118
Table C.5 – Write Method AddressSpace Definition .....	118
Table C.6 – GetPosition Method AddressSpace Definition .....	119
Table C.7 – SetPosition Method AddressSpace Definition.....	119

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## OPC UNIFIED ARCHITECTURE –

## Part 5: Information Model

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International Standard IEC 62541-5 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Defined ProgressEventType in 6.4.35 identifying the progress of an operation such as a service call (issue number 0057);
- b) Defined DataType called BitFieldMaskDataType in 12.18 representing a bit field where individual fields can be written without redefining other fields (issue number 0188);
- c) Delete Property SamplingRateCount in ServerDiagnosticSummaryDataType (12.9) as it was not needed (issue number 0635);

- d) Added the Property “EffectiveTransitionTime” to TransitionVariableType in B.4.4 (issue number 0728);
- e) Introduced VariableType OptionSetType in 7.19 representing a bit mask and text defining the semantic of the individual bits (issue number 0983);
- f) Added a new EventType called SystemStatusChangeEvent in 6.4.30 that can be used to indicate connection to the underlying system is lost (issue number 1416);
- g) Added properties to ServerCapabilitiesType (6.3.2) describing the max array length and string length for variables as well as added an object for operation limits (max size of arrays when calling services (e.g. read)). Added type OperationLimitsType (6.3.11) containing that information (issue number 1451);
- h) Added SecureChannelId to AuditActivateSessionEventType (6.4.10) and adapted text in various places (issue number 1492);
- i) Added normative Annex C defining FileType and Methods used to transfer files (issue number 1502);
- j) Added a Method GetMonitoredItems on ServerType (6.3.1) to receive information on monitored items (issue 1543);
- k) Removed the concept of *ModelParent* from document as it is not that useful. The *NodeId* of the *ReferenceType* will be kept not breaking existing applications (issue numbers 1555 and 1556).
- l) Added meta data for namespaces in ServerType (6.3.1) and created types for managing that (issue number 1702).
- m) Added representations for ModellingRules OptionalPlaceholder in 8.4.4 and MandatoryPlaceholder in 8.4.5 (issue number 1831);
- n) Added new types NonTransparentNetworkRedundancyType (6.3.10), NetworkGroupDataType (12.19) and EndpointUrlListDataType (12.20) to manage HotAndMirrored redundancy. Added more description on redundancy and updated RedundancySupport enumeration in 12.5 (issue number 2031);

The text of this standard is based on the following documents:

CDV	Report on voting
65E/376/CDV	65E/404/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62541 series, published under the general title *OPC Unified Architecture*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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